NASA'S MISSION TO PLANET EARTH

EARTH PROBES

DATA INFORMATION SYSTEM

EOS

EARTH OBSERVING SYSTEM

Advertising External Data Providers

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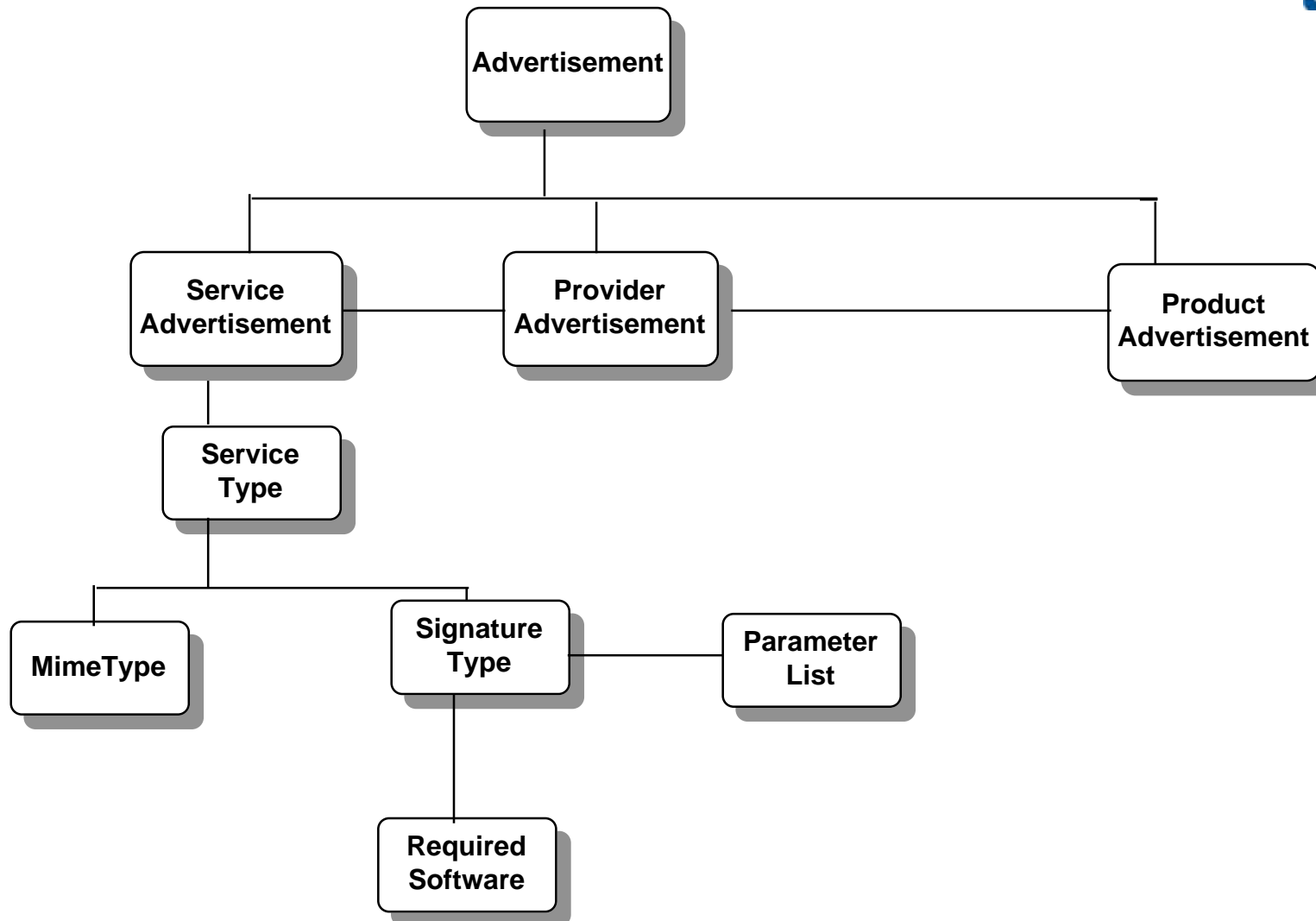
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Overview Concepts

Options

- **Internet Service**

  - **Give us a URL to their Web site.**

- **Service with Data Provider supplied client**

  - **Advertiser invokes or installs a client built by Data Provider which can access an ECS service or one at the provider site.**

- **LDAS service which can be used with ECS client**

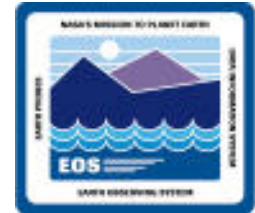 - **Allows for non-conformity to ECS schema, but ECS client can direct requests to the server.**

Service Advertisement Model
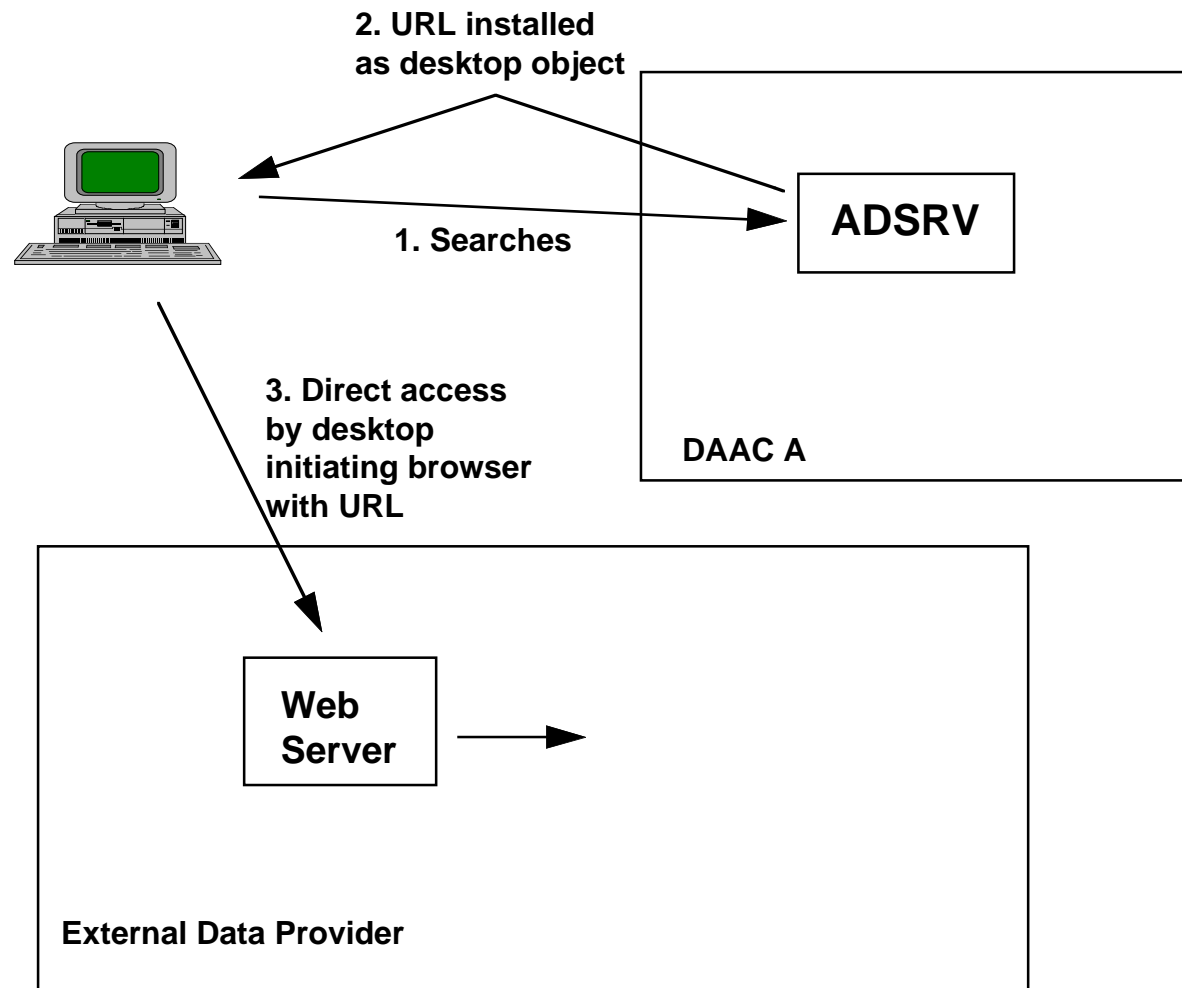

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Internet Service

- **Service provider specifies a Mime Type service advertisement**

- **Besides the name and description of the service, the only other requirement is the URL to the service.**

- **Could contain Java Applets or other advanced features. It will be up to service provider to determine user's browser capabilities, if they want to service low-end users.**

- **Installation means:**

    - **A desktop object is installed on the user's desktop.**

    - **The action associated with the object is to start the user's Web browser with the URL associated with the service.**

- **Invocation means:**

    - **The URL associated with the service is activated and loaded in the browser.**

- **The user is responsible for making sure that the browser that he/she is using is compatible with the capabilities of the site being accessed. In other words, if Java is required, the user should use Netscape to use the Java features.**
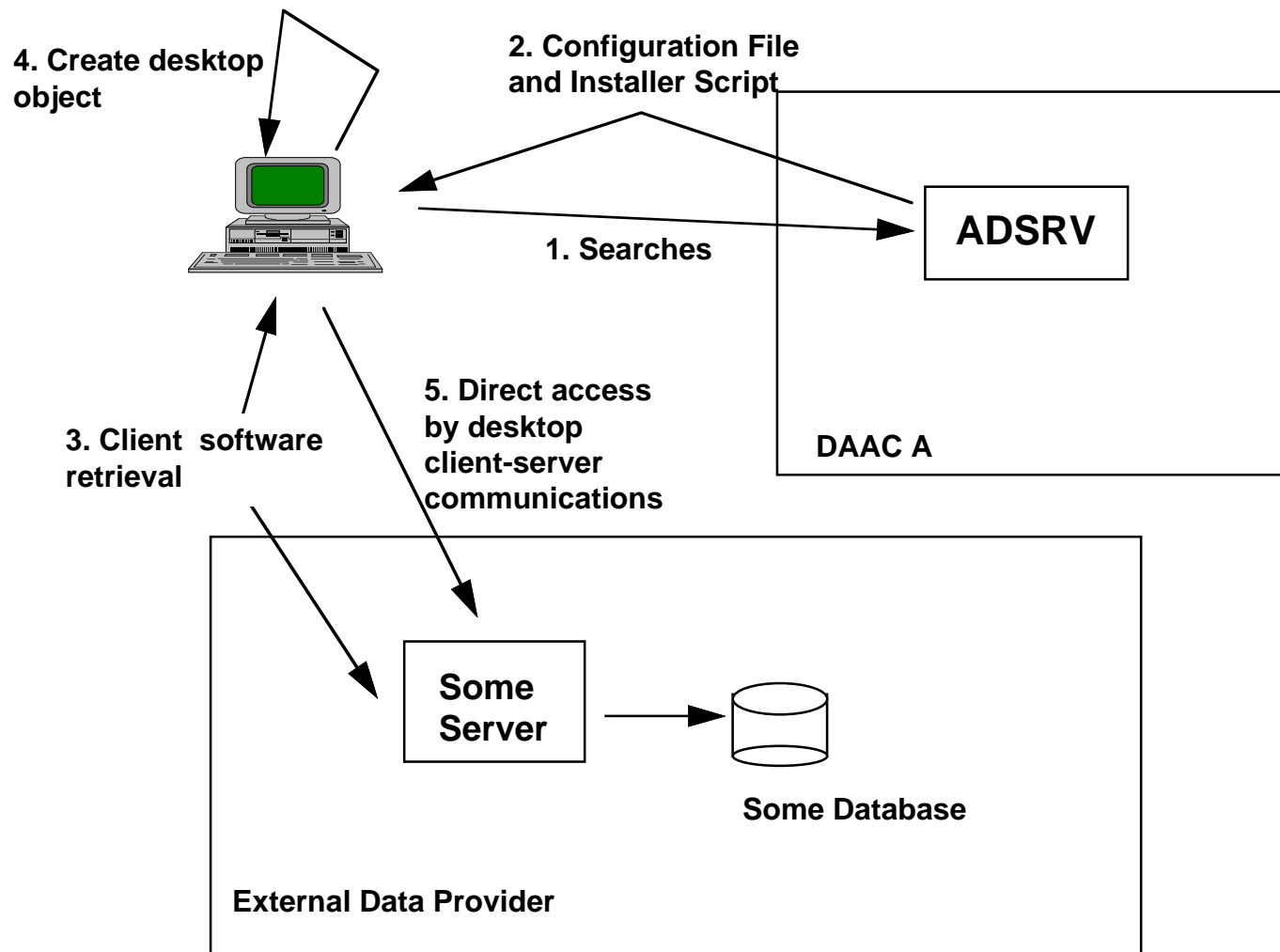
Internet Service Architecture

2. URL installed as desktop object

1. Searches

ADSRV

DAAC A

3. Direct access by desktop initiating browser with URL

Web Server

External Data Provider

Data Provider Supplied Client

- **Data Provider supplies advertisement which is signature type advertisement.**
    - **Includes Required Software specification to tell installer program what to install on client.**
    - **Script to run the installation and configuration file that will get passed to client or will be used to determine the command line arguments used to initialize client.**
    - **Advertising Service will describe the installation script and configuration file formats. These will be bourne shell scripts with some special environment variables to allow the provider to substitute things from the advertising service (for example, the name of the product advertisement)**
- **User will have to provide location to install the client and where to put the desktop object.**
- **Installer will execute the Data Provider's script and create desktop objects as appropriate.**
- **After completion, ECS (potentially) has no involvement between the user and the data provider.**

Data Provider Supplied Client Scenario

4. Create desktop object

2. Configuration File and Installer Script

ADSRV

1. Searches

DAAC A

5. Direct access by desktop client-server communications

3. Client software retrieval

Some Server

Some Database

External Data Provider

LDAS Service with ECS Client

Data Provider needs to install the LDAS software and define the schema.

- **Data Provider must get permission from a DAAC to write to the DDICT.**
- **Schema gets exported to DDICT using normal Data Server methods. It does not get integrated into any LIM/DIM.**
- **Data Provider submits signature type service advertisements for those services they will provide.**
- **Specify the required software as the ECS Earth Science Search Tool (ESST) with the proper configuration.**

Installer will create a desktop object with the ESST and the proper UR to the Data Provider site.

ESST will see the Data Provider as a direct connect to a Data Server.

- **Uses advertising service to determine the services available at that provider.**
- **Uses data dictionary to determine the attributes and valid values.**
- **All requests will go directly to Data Providers "data server".**

Data Provider with LDAS

Client

4. Configuration File for ESST.

3. Search

5. Direct Connect to LDAS

2. Service Advertisements

1. Schema and definitions

LDAS

Extended Data Provider

DAAC A

ADSRV

Advertising DB

DDICT

DDICT DB